

EXHIBIT 8

DICKINSON WRIGHT RLLP
 Mark H. Rogge (SBN 298381)
 800 W. California Avenue, Suite 110
 Sunnyvale, CA 94086
 Telephone: (408) 701-6200
 Facsimile: (844) 670-6009
mrogge@dickinsonwright.com

DICKINSON WRIGHT PLLC
 Christopher A. Mitchell
 (Admitted *pro hac vice*)
 200 Ottawa Ave NE, Suite 1000
 Grand Rapids, MI 49503
 (616) 336-1058
cmitchell@dickinsonwright.com

Attorneys for Plaintiff
Cellulose Material Solutions, LLC

**UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA**

CELLULOSE MATERIAL SOLUTIONS,
 LLC

Plaintiff,

v.

SC MARKETING GROUP, INC.,

Defendant.

CASE NO.: 3:22-cv-03141-LB

**PLAINTIFF'S SECOND
 SUPPLEMENTAL DISCLOSURE OF
 ASSERTED CLAIMS AND
 INFRINGEMENT CONTENTIONS**

Pursuant to Patent L.R. 3-1 and Patent L.R. 3-2, Plaintiff Cellulose Material Solutions, LLC ("CMS") hereby provides to Defendant SC Marketing Group, Inc. ("SC Marketing") the following Second Supplemental Disclosure of Asserted Claims and Infringement Contentions respecting the patent in suit, U.S. Patent No. 11,078,007 ("the '007 Patent") and the accused products of SC Marketing.

CMS makes this disclosure based upon information presently known and reasonably available to it as of this date. Discovery in this matter is at a very early stage and is ongoing. As

such, CMS's investigation into the extent of infringement by SC Marketing is ongoing, and CMS makes these disclosures based upon information that it has been able to obtain, together with its current good faith beliefs and information regarding the accused products of SC Marketing. CMS reserves the right to move the Court for leave to amend these contentions to the full extent permitted by the Patent Local Rules and the Federal Rules of Civil Procedure, including in view of information developed during this case through discovery, additional factual investigation, the Court's claim construction order, or as other circumstances may require.

I. PATENT L.R. 3-1: DISCLOSURE OF ASSERTED CLAIMS AND INFRINGEMENT CONTENTIONS

A. PATENT L.R. 3-1(a), (b): Asserted Claims, Statutory Basis, and Accused Products

Pursuant to Patent Local Rules 3-1(a) and (b), CMS provides the following chart identifying each asserted claim of the '007 Patent, the applicable subsection of 35 U.S.C. Section 271 asserted, and the accused product, of which CMS is presently aware, offered for sale and sold by SC Marketing.

CMS's investigation is ongoing, and it thus reserves the right to amend or supplement the asserted claims based upon continued discovery and investigation.

ASSERTED CLAIMS	STATUTORY BASIS	ACCUSED PRODUCTS
1-19	35 U.S.C. § 271(a)	SC Marketing's RENEWLINER products (see, e.g., https://www.thermalshipping.com/products/box-liners/renewliner/)
20-22	35 U.S.C. § 271(a)	SC Marketing's RENEWLINER products (see, e.g., https://www.thermalshipping.com/products/box-liners/renewliner/)
23-24	35 U.S.C. § 271(b) and/or (c)	SC Marketing's RENEWLINER products (see, e.g., https://www.thermalshipping.com/products/box-liners/renewliner/) in combination with packaging containers by third party customers of the RENEWLINER products

B. PATENT L.R. 3-1(c), (e): Claim Chart and Correspondence by Accused Products

Pursuant to Local Rules 3-1(c) and (e), CMS provides the following claim chart, including for each limitation thereof whether the limitation is asserted to be infringed literally or under the doctrine of equivalents. Unless the claim term in the chart below is highlighted in yellow (which identifies that the element is alleged at this time to be met by the doctrine of equivalents), the claim term is alleged to be literally satisfied by the accused product. For the sake of clarity, CMS states that, presently, the RENEWLINER product is understood to literally satisfy all limitations of the asserted claims of the '007 Patent, as set forth below. However, discovery in this case has only just commenced and the Court has yet to issue a claim construction order. Consequently, CMS reserves the right to amend its contentions as to literal and/or equivalents infringement as may be required.

As manifest in the chart below, CMS alleges all limitations recited in the asserted claims are literally present in the accused RENEWLINER product. However, CMS reserves the right to amend its contentions in these regards in view of information developed during this case through discovery, additional factual investigation, the Court's claim construction order, or as other circumstances may require.

The infringement evidence cited in these charts is exemplary and not exhaustive, and addresses the asserted claims without the benefit of full discovery or the Court's claim construction. CMS therefore reserves the right to amend the chart below in view of information developed during this case through discovery, additional factual investigation, the Court's claim construction order, or as other circumstances may require.

CLAIM 1	EXPLANATION
<p>A method for insulating packaging containers comprising: providing a flat laminated packaging insulation which is of uniform thickness, resiliently compressible and foldable, cut to size for locating in a packaging container, said packaging insulation comprising an air laid thermoplastic fibrous batt comprised primarily of thermoplastic fibers, said batt being of uniform thickness, resiliently compressible and foldable, and having foldable thermoplastic film material adhered to both sides of said batt to form a laminate which can be folded without the need for creases, grooves or cut lines in said laminate to facilitate folding, whereby said laminated packaging insulation can be manufactured, compressed and shipped as a flat panel of uniform thickness, and allowed to resiliently expand and be folded for insertion into a packaging container.</p>	<p>The RENEWLINER product satisfies, or is understood by CMS to satisfy, the limitations of claim 1, on the basis of CMS's evaluation of actual samples of the RENEWLINER product and information provided in SC Marketing's product literature, and information provided in SC Marketing's published US patent application (which, on information and belief, discloses embodiments corresponding to the RENEWLINER product). See Exhibits A-E.</p> <p>More specifically, Exhibits A through E demonstrate that the RENEWLINER product is a flat packaging insulation of uniform thickness (see, e.g., photos of Exhibits B and D, discussion of product in Exhibit D, drawings of Exhibit E), resiliently compressible (see, e.g., discussion of product at Exhibit A and note [*] below) and foldable (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E), and cut to size for locating in a packaging container (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E).</p> <p>The RENEWLINER product is understood to comprise an air laid thermoplastic fibrous batt comprised primarily of thermoplastic fibers (see, e.g., discussion of product at Exhibit D and discussion in Exhibit E), said batt being of uniform thickness (see, e.g., photos of Exhibits B and D, discussion of product in Exhibit D, drawings of Exhibit E), resiliently compressible (see, e.g., discussion of product at Exhibit A and note [*] below) and foldable (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E), and having foldable thermoplastic film material adhered to both sides of said batt to form a laminate (see, e.g., discussion in Exhibit E and product photos of Exhibit A and C).</p>

	<p>The RENWLINER product can be folded without the need for creases, grooves or cut lines in said laminate to facilitate folding, whereby said laminated packaging insulation can be manufactured, compressed and shipped as a flat panel of uniform thickness, and allowed to resiliently expand and be folded for insertion into a packaging container (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E, product discussion of Exhibit D and discussion of E).</p> <p>*NOTE: Exhibit A, as well as Exhibits B through D, show images of the RENEWLINER product in both flat and deformed conditions. Exhibit D, among others, states that the RENEWLINER product is shipped flat; it is temporarily deformed thereafter for insertion into packaging. Exhibit A states that the RENEWLINER product has been “[c]ompression tested for maximal protection in harsh handling environments.”</p>
CLAIM 2	EXPLANATION
The method of claim 1 wherein said fibrous batt includes from about 5 to about 30% thermoplastic binder fibers mixed with and adhered to at least some of said thermoplastic fibers.	On the basis of at least CMS’s evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include from about 5 to about 30% thermoplastic binder fibers mixed with and adhered to at least some of the thermoplastic fibers of the batt.
CLAIM 3	EXPLANATION
The method of claim 2 in which said thermoplastic fibers, said thermoplastic binder fibers and said thermoplastic film are all made of the same thermoplastic polymer material, whereby said packaging insulation used may be readily commercially recycled.	The RENEWLINER product is disclosed to be 100% PET and recyclable (see, e.g., discussion of product in Exhibit D and discussion of Exhibit E).
CLAIM 4	EXPLANATION
The method of claim 3 wherein said thermoplastic material is PET.	The RENEWLINER product is disclosed to be 100% PET (see, e.g., discussion of product in Exhibit D and discussion of Exhibit E).
CLAIM 5	EXPLANATION
The method of claim 4 wherein said thermoplastic material is recycled PET.	The RENEWLINER product is disclosed to be sourced from recycled drink bottles (see, e.g., discussion of product in Exhibit D).

CLAIM 6	EXPLANATION
The method of claim 3 in which said fibers have lengths of between about 20 to about 72 mm.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include thermoplastic fibers having lengths of between about 20 to about 72 mm.
CLAIM 7	EXPLANATION
The method of claim 6 in which the denier of said thermoplastic fibers is between about 1 to about 10.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the thermoplastic fibers are understood to have a denier of between about 1 to about 10.
CLAIM 8	EXPLANATION
The method of claim 7, in which the denier of said thermoplastic fibers is from about 2 to about 8.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the thermoplastic fibers are understood to have a denier of between about 2 to about 8.
CLAIM 9	EXPLANATION
The method of claim 8 in which the denier of said thermoplastic fibers is from about 4 to about 6.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the thermoplastic fibers are understood to have a denier of between about 4 to about 6.
CLAIM 10	EXPLANATION
The method of claim 4 which said PET film material is from about 2 to about 20 microns thick, and is made of recycled PET.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the PET film material is from about 2 to about 20 microns thick. The RENEWLINER product is disclosed to be sourced from recycled drink bottles (see, e.g., discussion of product in Exhibit D).
CLAIM 11	EXPLANATION
The method of claim 10 in which said thermoplastic binder fibers comprise from about 10 to about 25% of said fibers in said batt.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include from about 10 to about 25% thermoplastic binder fibers.
CLAIM 12	EXPLANATION
The method of claim 10 in which said thermoplastic binder fibers comprise from about 15 to about 20% of said fibers in said batt; said binder fibers comprising a higher melting point thermoplastic core fiber;	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include from about 15 to about 25% thermoplastic binder fibers, which binder fibers comprise a higher melting point

encased in a lower melting point thermoplastic sheath.	thermoplastic core fiber encased in a lower melting point thermoplastic sheath.
CLAIM 13	EXPLANATION
The method of claim 1 in which said laminated packaging insulation is shipped flat and compressed for economy of shipment, and for folding to fit its intended packaging container when provided to a customer for use as packaging insulation.	The RENEWLINER product is understood to be shipped flat and folded for insertion into a packaging container (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E, product discussion of Exhibit D and discussion of Exhibit E).
CLAIM 14	EXPLANATION
The method of claim 13 in which two separate ones of said flat panels of said laminated packaging insulation are provided for said package container, said package container having a bottom, rear side, front side and two end sides and a top, such that one of said flat panels can be folded to cover said bottom, rear side and top of the container, and the other of which can be folded to cover said two ends and front side of the container.	The RENEWLINER product satisfies the construction of claim 14, as shown, for example, in the photos of Exhibit A and the drawings of Exhibit E.
CLAIM 15	EXPLANATION
The method of claim 13 wherein said fibrous batt includes from about 5 to about 30% thermoplastic binder fibers mixed with and adhered to at least some of said fibers, and said fibers, said binder fibers and said film are made of recycled PET.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include from about 5 to about 30% thermoplastic binder fibers mixed with and adhered to at least some of the thermoplastic fibers of the batt. The RENEWLINER product is disclosed to be sourced from recycled drink bottles (see, e.g., discussion of product in Exhibit D).
CLAIM 16	EXPLANATION
The method of claim 15 in which said PET fibers have lengths of between about 20 to about 60 mm.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include thermoplastic fibers having lengths of between about 20 to about 60 mm. The RENEWLINER product is disclosed to be 100% PET (see, e.g., discussion of product in Exhibit D and discussion of Exhibit E).
CLAIM 17	EXPLANATION
The method of claim 16 in which the denier of said PET fibers is between about 1 to about 10.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product,

	the thermoplastic fibers are understood to have a denier of between about 1 to about 10.
CLAIM 18	EXPLANATION
The method of claim 16 in which said PET film material is from about 2 to about 20 microns thick.	On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the PET film material is from about 2 to about 20 microns thick.
CLAIM 19	EXPLANATION
The method of claim 16 in which two separate ones of said flat panels of said laminated packaging insulation are provided for said package container, said package container having a bottom, rear side, front side and two end sides and a top, such that one of said flat panels can be folded to cover said bottom, rear side and top of the container, and the other of which can be folded to cover said two ends and front side of the container.	The RENEWLINER product satisfies the construction of claim 19, as shown, for example, in the photos of Exhibit A and the drawings of Exhibit E.
CLAIM 20	EXPLANATION
A package insulation material comprising: a flat laminated packaging insulation which is of uniform thickness, resiliently compressible and foldable, cut to size for locating in a packaging container, said packaging insulation comprising a thermoplastic fibrous batt comprised primarily of thermoplastic fibers, said batt being of uniform thickness, resiliently compressible and foldable, and having foldable thermoplastic film material adhered to both sides of said batt to form a laminate which can be folded without the need for creases, grooves or cut lines in said laminate to facilitate folding, whereby said laminated packaging insulation can be manufactured, compressed and shipped as a flat panel, and allowed to resiliently expand and be folded for insertion into a packaging container.	<p>The RENEWLINER product satisfies, or is understood by CMS to satisfy, the limitations of claim 20, on the basis of CMS's evaluation of actual samples of the RENEWLINER product and information provided in SC Marketing's product literature, and information provided in SC Marketing's published US patent application (which, on information and belief, discloses embodiments corresponding to the RENEWLINER product). See Exhibits A-E.</p> <p>More specifically, Exhibits A through E demonstrate that the RENEWLINER product is a flat packaging insulation of uniform thickness (see, e.g., photos of Exhibits B and D, discussion of product in Exhibit D, drawings of Exhibit E), resiliently compressible (see, e.g., discussion of product at Exhibit A and note [*] below) and foldable (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E), and cut to size for locating in a packaging container (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E).</p>

	<p>The RENEWLINER product is understood to comprise a thermoplastic fibrous batt comprised primarily of thermoplastic fibers (see, e.g., discussion of product at Exhibit D and discussion in Exhibit E)., said batt being of uniform thickness (see, e.g., photos of Exhibits B and D, discussion of product in Exhibit D, drawings of Exhibit E), resiliently compressible (see, e.g., discussion of product at Exhibit A and note [*] below) and foldable (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E), and having foldable thermoplastic film material adhered to both sides of said batt to form a laminate (see, e.g., discussion in Exhibit E and product photos of Exhibit A and C).</p> <p>The RENWLINER product can be folded without the need for creases, grooves or cut lines in said laminate to facilitate folding, whereby said laminated packaging insulation can be manufactured, compressed and shipped as a flat panel, and allowed to resiliently expand and be folded for insertion into a packaging container (see, e.g., photos of Exhibits A, C, and D, drawings of Exhibit E, product discussion of Exhibit D and discussion of E).</p> <p>*NOTE: Exhibit A, as well as Exhibits B through D, show images of the RENEWLINER product in both flat and deformed conditions. Exhibit D, among others, states that the RENEWLINER product is shipped flat; it is temporarily deformed thereafter for insertion into packaging. Exhibit A states that the RENEWLINER product has been “[c]ompression tested for maximal protection in harsh handling environments.”</p>
CLAIM 21	EXPLANATION
<p>The package insulation material of claim 20 wherein said thermoplastic fibrous batt includes from about 5 to about 30% thermoplastic binder fibers mixed with and adhered to at least some of said thermoplastic fibers; said thermoplastic</p>	<p>On the basis of at least CMS’s evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include from about 5 to about 30% thermoplastic binder fibers mixed with and</p>

<p>fibers of said fibrous batt being recycled PET fibers having lengths of between about 20 to about 60 mm, and a denier of between about 1 to about 10; said thermoplastic film material having a thickness of about 2 to about 20 microns, and is made of recycled PET.</p>	<p>adhered to at least some of the thermoplastic fibers of the batt.</p> <p>The RENEWLINER product is disclosed to be sourced from recycled drink bottles (see, e.g., discussion of product in Exhibit D).</p> <p>The RENEWLINER product is disclosed to be 100% PET and recyclable (see, e.g., discussion of product in Exhibit D and discussion of Exhibit E).</p> <p>On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the RENEWLINER product is understood to include thermoplastic fibers having lengths of between about 20 to about 60 mm.</p> <p>On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the thermoplastic fibers are understood to have a denier of between about 1 to about 10.</p> <p>On the basis of at least CMS's evaluation of actual samples of the RENEWLINER product, the PET film material is from about 2 to about 20 microns thick.</p>
CLAIM 22	EXPLANATION
<p>The package insulation material of claim 21 comprising two separate ones of said flat panels of said laminated packaging insulation for said package container, said package container having a bottom, rear side, front side and two end sides and a top, such that one of said flat panels can be folded to cover said bottom, rear side and top of the container, and the other of which can be folded to cover said two ends and front side of the container.</p>	<p>The RENEWLINER product satisfies the construction of claim 22, as shown, for example, in the photos of Exhibit A and the drawings of Exhibit E.</p>
CLAIM 23	EXPLANATION
<p>A product shipping combination comprising: a packaging container; a flat laminated packaging insulation which is of uniform thickness, resiliently, compressible and foldable, being cut to size for folding and locating in said packaging container,</p>	<p>The RENEWLINER product satisfies, or is understood by CMS to satisfy, the limitations of claim 20, on the basis of CMS's evaluation of actual samples of the RENEWLINER product and information provided in SC Marketing's product literature, and</p>

1 said packaging insulation comprising an air
2 laid PET fibrous batt comprised primarily of
3 PET fibers, said batt being of uniform
4 thickness, resiliently compressible and
5 foldable, and having foldable PET film
6 material adhered to both sides of said batt to
7 form a laminate which can be folded
8 without the need for creases, grooves or cut
9 lines in said laminate to facilitate folding,
10 whereby said laminated packaging
11 insulation can be manufactured, compressed
12 and shipped as a flat panel, allowed to
13 resiliently expand and be folded for
14 insertion into said packaging container; said
15 laminated packaging insulation being folded
16 and inserted into said packaging container.

information provided in SC Marketing's
published US patent application (which, on
information and belief, discloses embodiments
corresponding to the RENEWLINER product).
See Exhibits A-E.

More specifically, Exhibits A through E
demonstrate that the RENEWLINER product
is a flat packaging insulation of uniform
thickness (see, e.g., photos of Exhibits B and
D, discussion of product in Exhibit D,
drawings of Exhibit E), resiliently
compressible (see, e.g., discussion of product
at Exhibit A and note [*] below) and foldable
(see, e.g., photos of Exhibits A, C, and D,
drawings of Exhibit E), and cut to size for
locating in a packaging container (see, e.g.,
photos of Exhibits A, C, and D, drawings of
Exhibit E).

The RENEWLINER product is understood to
comprise a thermoplastic fibrous batt
comprised primarily of thermoplastic fibers
(see, e.g., discussion of product at Exhibit D
and discussion in Exhibit E)., said batt being
of uniform thickness (see, e.g., photos of
Exhibits B and D, discussion of product in
Exhibit D, drawings of Exhibit E), resiliently
compressible (see, e.g., discussion of product
at Exhibit A and note [*] below) and foldable
(see, e.g., photos of Exhibits A, C, and D,
drawings of Exhibit E), and having foldable
thermoplastic film material adhered to both
sides of said batt to form a laminate (see, e.g.,
discussion in Exhibit E and product photos of
Exhibit A and C).

The RENWLINER product can be folded
without the need for creases, grooves or cut
lines in said laminate to facilitate folding,
whereby said laminated packaging insulation
can be manufactured, compressed and shipped
as a flat panel, and allowed to resiliently
expand and be folded for insertion into a
packaging container (see, e.g., photos of
Exhibits A, C, and D, drawings of Exhibit E,

	<p>product discussion of Exhibit D and discussion of E).</p> <p>The RENEWLINER product, as it is presently understood, is not sold in combination with a packaging container as a single unit of sale. However, it is understood that the RENEWLINER is sold for combination with packaging containers by the purchaser of the RENEWLINER (see, e.g., discussion and photo of Exhibit D; photo of Exhibit C). It is further understood that Defendant's customers, such as third party Home Chef, fold and insert the RENEWLINER product into packaging containers.</p> <p>*NOTE: Exhibit A, as well as Exhibits B through D, show images of the RENEWLINER product in both flat and deformed conditions. Exhibit D, among others, states that the RENEWLINER product is shipped flat; it is temporarily deformed thereafter for insertion into packaging. Exhibit A states that the RENEWLINER product has been "[c]ompression tested for maximal protection in harsh handling environments."</p>
CLAIM 24	EXPLANATION
<p>The product shipping combination of claim 23 comprising; two separate ones of said flat panels of said laminated packaging insulation for said package container, said package container having a bottom, rear side, front side and two end sides and a top, such that one of said flat panels can be folded to cover said bottom, rear side and top of the container, and the other of which can be folded to cover said two ends and front side of the container.</p>	<p>When combined with a "packaging container" as recited in Claim 24, the RENEWLINER product satisfies, or is understood by CMS to satisfy, the limitations of claim 24, on the basis of CMS's evaluation of actual samples of the RENEWLINER product and information provided in SC Marketing's product literature, and information provided in SC Marketing's published US patent application (which, on information and belief, discloses embodiments corresponding to the RENEWLINER product). See Exhibits A-E.</p>

C. PATENT L.R. 3-1(d): Indirect Infringement

Pursuant to Local Rule 3-1(d), CMS states that claims 23 and 24 of the '007 Patent, which are alleged to be indirectly infringed by SC Marketing, are directly infringed by at least third party

1 Home Chef (www.homechef.com), which is a known customer of SC Marketing and which
2 therefore directly infringes claims 23 and 24 by purchasing from SC Marketing the
3 RENEWLINER product and combining that product with package containers for shipment of
4 certain food products.

5
6 CMS further states that SC Marketing contributes to the direct infringement of claims 23
7 and 24 by its customers because the RENEWLINER product is not a staple article of commerce
8 suitable for a substantial non-infringing use, and because SC Marketing knows, or has acted in
9 willful disregard of the fact, that use by its customers of the RENEWLINER product in the
10 manner promoted by SC Marketing infringes the '007 Patent.

11
12 CMS further states that SC Marketing induces direct infringement of claims 23 and 24 by
13 its customers because the RENEWLINER is designed and instructed to be combined with a
14 packaging container in satisfaction of claims 23 and 24, and because SC Marketing knows, or has
15 acted in willful disregard of the fact, that use by its customers of the RENEWLINER product in
16 the manner promoted by SC Marketing infringes the '007 Patent.

17
18 CMS's investigation is ongoing, and it thus reserves the right to amend or supplement the
19 foregoing based upon continued discovery and investigation.

20 D. PATENT L.R. 3-1(f): Priority

21 Pursuant to Local Rule 3-1(f), CMS states that the '007 Patent does not claim priority to
22 any earlier-filed application. The priority date of the '007 Patent is its filing date, June 27, 2016.

23 E. PATENT L.R. 3-1(g): Identity of Covered Products

24 Pursuant to Local Rule 3-1(g), CMS states that its own commercially-available product,
25 sold under the brand-name INFINITYCORE, is comprehended by each of asserted claims 1-22.

1 The INFINITYCORE product has been commercially available since prior to the issue date of
2 the '007 Patent. See Exhibits F-H.

3 F. PATENT L.R. 3-1(h): Timing of Infringement

4 Pursuant to Local Rule 3-1(h), CMS states the first known public offering by SC
5 Marketing of the RENEWLINER product was in or about late 2016. The asserted '007 Patent
6 subsequently issued on August 3, 2021, which is also understood to be the date when damages
7 for the asserted infringement began to accrue. SC Marketing's sale and offer for sale of the
8 RENEWLINER product accused of infringing the '007 Patent is understood to be ongoing and,
9 as such, damages for the alleged infringement continue to accrue. CMS seeks damages for the
10 entire period of SC Marketing's infringement.
11

12 G. PATENT L.R. 3-1(i): Basis for Willful Infringement

13 Pursuant to Local Rule 3-1(i), CMS states that SC Marketing knew or should have known
14 that making, using, offering to sell, selling within the United States, and/or importing into the United
15 States its RENEWLINER product infringes the '007 Patent, including by reason of the following: SC
16 Marketing's RENEWLINER product was at least wrongfully derived from CMS's disclosures to
17 SC Marketing during the course of the parties' prior business relationship. Furthermore, SC
18 Marketing was aware of the '007 Patent, and CMS's allegations of infringement, since long prior
19 to its issuance. Finally, SC Marketing has continued to infringe the '007 Patent even after that
20 patent's issuance and institution of this litigation.
21

22
23 **II. PATENT L.R. 3-2: DOCUMENT PRODUCTION ACCOMPANYING**
24 **DISCLOSURE**

25 Pursuant to Local Rule 3-2, CMS states as follows with respect to each category of
26 documents identified in Local Rules 3-2(a) through (j):
27
28

1 **(a)** To the extent such documents exist and are in its possession, custody, or control,
2 CMS will make available for inspection and copying documents “sufficient to evidence each
3 discussion with, disclosure to, or other manner of providing to a third party, or sale of or offer to
4 sell, or any public use of, the claimed invention prior to the date of application for the patent in
5 suit.”
6

7 **(b)** To the extent such documents exist and are in its possession, custody, or control,
8 CMS will make available for inspection and copying documents “evidencing the conception,
9 reduction to practice, design, and development of each claimed invention, which were created on
10 or before the date of application for the patent in suit or the priority date identified pursuant to
11 Patent L.R. 3-1(f), whichever is earlier.”
12

13 **(c)** A copy of the file history for the ‘007 Patent has already been served on October
14 13, 2022, with Plaintiff’s original Infringement Contentions.

15 **(d)** Documents evidencing CMS’s ownership of the ‘007 Patent are included herewith
16 as Exhibit I.

17 **(e)** To the extent such documents exist and are in its possession, custody, or control,
18 CMS will make available for inspection and copying documents “sufficient to show the operation
19 of any aspects or elements of such instrumentalities the patent claimant relies upon as embodying
20 any asserted claims.”
21

22 **(f)** Other than the documents of Exhibit I, there are no “agreements, including
23 licenses, transferring an interest in any patent-in-suit.”

24 **(g)** To the extent such documents exist and are in its possession, custody, or control,
25 CMS will make available for inspection and copying any and all “agreements that the party
26
27
28

1 asserting infringement contends are comparable to a license that would result from a hypothetical
2 reasonable royalty negotiation.”

3 (h) To the extent such documents exist and are in its possession, custody, or control,
4 CMS will make available for inspection and copying any and all “agreements that otherwise may
5 be used to support the party asserting infringement’s damages case.”

6 (i) To the extent such documents exist and are in its possession, custody, or control,
7 CMS will make available for inspection and copying any and all “documents sufficient to show
8 marking of such embodying accused instrumentalities....”

9 (j) CMS states that there are no documents comprising or reflecting a F/RAND
10 commitment or agreement with respect to the ‘007 Patent.

11 CMS’s investigation is ongoing and discovery has only just commenced in this action.
12 CMS therefore reserves the right to supplement or amend the foregoing.

13 Dated: 26 October 2022

DICKINSON WRIGHT PLLC

14 By: /s/ Chris Mitchell
15 Christopher A. Mitchell. (Admitted *pro hac vice*)
16 **DICKINSON WRIGHT PLLC**
17 200 Ottawa Ave NE, Suite 1000
18 Grand Rapids, MI 49503
19 Telephone: (616) 336-1058
20 cmitchell@dickinsonwright.com

21 Mark H. Rogge
22 **DICKINSON WRIGHT RLLP**
23 800 W. California Avenue, Suite 110
24 Sunnyvale, CA 94086
25 Telephone: (408) 701-6200
26 mrogge@dickinsonwright.com

27 *Attorneys for Plaintiff Cellulose Material*
28 *Solutions, LLC*

CERTIFICATE OF SERVICE

I hereby certify that, on 26 October 2022, a copy of Plaintiff's Second Supplemental Disclosure of Asserted Claims and Infringement Contentions was served via email on counsel for Defendant as identified below.

Ryan R. Smith, Esq.
Taylor E. Pfeifer, Esq.
Wilson Sonsini Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94304
Telephone: (650) 493-9300
Facsimile: (650) 565-5100
rsmith@wsgr.com
tpfeifer@wsgr.com

EXHIBIT A



The world’s first curbside recyclable insulated shipping system.

Sourced from the globe’s most recyclable plastic,
PET, Renewliner debuts the world’s first curbside
recyclable insulated shipping system.



One of the most sustainable projects in the world.

Recognized by the Cold Chain Global Forum as one of the most
sustainable temperature-controlled projects around, Renewliner
reimagines what’s possible with sustainable packaging.



Renewliner

Styrofoam, meet your match.

The thermal performance of Styrofoam, in a
lighter, more sustainable package.

Made from recycled water bottles.

All ink is water-based. No adhesives, PVC, papers
or contaminants.

Inch for inch.

Thermal performance on par with Styrofoam
pound for pound, inch for inch.

The loop has been closed.

Manufactured from a true closed-loop material by
extracting waste from current waste streams for a
highly recycled product.

Seal the deal.

Innovative design and highly flexible material
improves edge seals and reduces air loss.

Crushed it.

Compression-tested for maximal protection in
harsh handling environments.

So fresh, so clean.

Anti-microbial.
Hypoallergenic.
Hygienic.

Shipping costs, lowered.

Lightweight design reduces shipping costs
through dim-weight package optimization.

Full speed ahead.

The fastest production process on the market, plus
high-speed packout.

Custom sizing from ½” to 2”+

for optimal performance in every season and
shipping duration.

FDA approved materials for food and medication.

PET is one of few FDA approved materials for both
direct and indirect food and medication contact.

Knock, knock. Sustainability is calling.

Learn how our sustainable cold chain solutions can connect your
company to earth-conscious consumers, wherever they are.

[Contact Us](#)



1196 Simmons Lane
Novato, CA 94945

(415) 389-5004

sales@thermalshipping.com

Copyright © 2022
Thermal Shipping Solutions.
All rights reserved.

Industries

Alcohol

Animal Health

Baked Goods

Beverages

Botanicals

Cold Storage

Confections

Groceries

Healthcare

Meal Kits

Pharmaceuticals

Products

Mailer & Envelopes

Kangaroo Mailer

Renewmailer

DuraShield Envelopes

Box Liners

Renewliner

DuraShield Box Liners

Refrigerants

Gel Ice Packs

Latest Innovation

Company

Who we are

History

TSS Advantage &
Innovation

Locations

Sustainable Leadership

Giveback

Do Better

(r) Value

Resources

Thermal Ecolab

Cold Chain Exchange

Careers

Contact Us

Privacy Policy

Terms and Conditions


EXHIBIT B



< [Back to Blog overview](#)

Renewliner: Curbside Insulated Shipping System Made From PET Part 1

In the age of ecommerce shipping, preserving our planet has become increasingly challenging. As we continue to consume more, we inevitably continue to waste more.

 TSS Thermalist

July 18, 2022 | Innovation



In the age of ecommerce shipping, preserving our planet has become increasingly challenging. As we continue to consume more, we inevitably continue to waste more. With this reality, finding ways to reduce, reuse, and recycle in novel ways takes on a new level of importance. Nearly 40% of all plastic waste comes from packaging, and we believe it’s time the industry puts a greater emphasis on incorporating sustainable design elements into product development.

When we set out to develop Renewliner, our curbside recyclable packaging solution, we knew we wanted to give our customers something that would enable them to reduce carbon emissions and contribute to a circular economy without sacrificing affordability, scalability, or aesthetics.

First, we began consulting with some of the nation’s top environmental experts from the EPA, APR, and SPC to understand how different materials we see in the packaging landscape impact our planet. One way we this can be done best is to see how each stack up when evaluating life cycle assessments.

Early on, we learned that there are some common misconceptions about how materials affect our environment. We don’t often discuss the impact a material has during the extraction and production stages, but in many cases these are the stages where the majority of pollution is being created.

In light of these facts, we ensured that the entire lifecycle of our material for Renewliner was considered when developing our PET-based solution. PET is a common packaging and insulation material that’s used in everything from water bottles to carpeting. One of the most unique things about PET is the level of recycling innovation being made year after year. PET is one of the only materials in existence with the technology to be infinitely recycled. These aspects are what quickly qualified the material as a top contender for our sustainable packaging project.

What we found particularly exciting about it was its incredibly low carbon footprint when compared to alternative packaging materials like cotton, denim, and paper. Along with the fact that it’s a readily available feedstock, PET enabled us to provide our customers with a solution primed for both scalability and sustainability. We found that by utilizing recycled PET, Renewliner reduces the environmental impact twofold by tackling the current pollution issues (removing material from the waste streams and giving them a second life), while also creating a product that will then be recycled again and again.

Stay tuned for part 2, where we will explore how we implemented PET to create a sustainable solution that can be used in a variety of applications.



[Read Part 2](#)



1196 Simmons Lane
Novato, CA 94945

(415) 389-5004

sales@thermalshipping.com

Copyright © 2022
Thermal Shipping Solutions.
All rights reserved.

Industries

- Alcohol
- Animal Health
- Baked Goods
- Beverages
- Botanicals
- Cold Storage
- Confections
- Groceries
- Healthcare
- Meal Kits
- Pharmaceuticals

Products

- Mailer & Envelopes**
 - Kangaroo Mailer
 - Renewmailer
 - DuraShield Envelopes
- Box Liners**
 - Renewliner
 - DuraShield Box Liners
- Refrigerants**
 - Gel Ice Packs
- Latest Innovation**

Company

- Who we are
- History
- TSS Advantage & Innovation
- Locations
- Sustainable Leadership**
- Giveback**
 - Do Better
 - (r) Value

Resources

- Thermal Ecolab
- Cold Chain Exchange
- Careers**
- Contact Us**
- Privacy Policy**
- Terms and Conditions**

EXHIBIT C



< [Back to Blog overview](#)

Renewliner: Curbside Insulated Shipping System Made From PET Part 2

Once we investigated the environmental benefits of PET, we moved on to identify some of the characteristics we knew our customers required: thermal performance, food contact safety, cushioning and protection, and, of course, aesthetics.

TSS Thermalist

July 18, 2022 | Innovation



Welcome to part 2 of our series on PET. You can catch up on [part 1 here](#).

Once we investigated the environmental benefits of PET, we moved on to identify some of the characteristics we knew our customers required: thermal performance, food contact safety, cushioning and protection, and, of course, aesthetics.

PET is used in various insulation applications worldwide, and after conducting testing in our lab we were able to quickly confirm Renewliner would be able to offer customers a solution that provides the thermal protection necessary to keep products unspoiled and within spec, even for transits exceeding 72 hours.

Because insulated packaging has a good possibility of coming in direct contact with foods and medications, we had to be sure that whatever material we settled on would be safe. PET is naturally inert and contains anti-bacterial properties, which is why it is used widely in direct food contact packaging products. PET is completely safe both for human and food contact.

When it comes to protecting delicate items, from medications and electronics to a perfectly ripe tomato, it was crucial to ensure Renewliner would protect them during an often-tough journey to the end consumer. PET contains cushioning capabilities that are unlike most other insulating materials, and we conducted real-world tests by sending out sample materials to national parcel carriers, all of which determined that it passed our crush test standards.

Finally, we understand the unboxing experience is an impactful moment. This is why we wanted Renewliner to “just look right” inside a box. PET not only looks fresh, it also looks professional, sanitary, and aesthetically pleasing.

It was a long research process, but we are confident that PET is the best material for a packaging solution that minimizes waste at all stages of the product lifecycle without sacrificing affordability, accessibility, or aesthetics. PET and Renewliner allows us to move toward a truly circular economy without the need to harvest any new materials, while also achieving the important goals associated with any high-quality packaging—which is why companies like L’Oréal, Nestle Waters, PepsiCo, and others are choosing PET solutions and investing into the PET closed loop circular economy.



[Read Part 1](#)



1196 Simmons Lane
Novato, CA 94945

(415) 389-5004

sales@thermalshipping.com

Copyright © 2022
Thermal Shipping Solutions.
All rights reserved.

Industries

- Alcohol
- Animal Health
- Baked Goods
- Beverages
- Botanicals
- Cold Storage
- Confections
- Groceries
- Healthcare
- Meal Kits
- Pharmaceuticals

Products

Mailer & Envelopes

- Kangaroo Mailer
- Renewmailer
- DuraShield Envelopes

Box Liners

- Renewliner
- DuraShield Box Liners

Refrigerants

- Gel Ice Packs

Latest Innovation

Company

Who we are

History

TSS Advantage &
Innovation

Locations

Sustainable Leadership

Giveback

Do Better

(r) Value

Resources

Thermal Ecolab

Cold Chain Exchange

Careers

Contact Us

Privacy Policy

Terms and Conditions

EXHIBIT D

Renewliner™

100% Recyclable Insulated Shipping System
Patent Pending



Quick Facts

- As feather-light as EPS in 20% of the space!
One delivery per week instead of one per day!
- Packs out faster and cleaner without errors.
Lines a box in 3 seconds and no annoying lid to irritate you customers!
- Curb side Recyclable!
Keeping items out of the landfill is best.
- Aesthetically pleasing and hygienic materials are easy to customize.
- Liners store flat and are easy to use.
- FDA Approved for indirect food contact.
- The flexible insulation allows a tighter (therefore smaller and cheaper) shipment!
Save money on dim-weight calculations!

TSS box-liners allow you to adapt to shipping variables while lowering costs.

Our compact, easy-to-use products achieve excellent insulation value while saving space and money!



415.389.5004

sales@thermalshipping.com

38 Miller Ave #252

Mill Valley, CA 94941

www.thermalshipping.com

Faster Packing and Better Cold Chain Performance without Bulky EPS Coolers!

High volume pharmaceutical and gourmet food shippers know how inefficient EPS coolers waste space and time. Thermal Shipping Solutions offers multiple high-speed packing solutions for large cold-chain parcel shipments that reduce your material handling and storage.

Our 100% ♻ PET liners pack out in seconds and are easier to open for your customers than any cooler. They reduce or eliminate waste compared to EPS coolers and our competitors' options. Most of all they give you better performance in less space for cheaper shipping!

Modern landfills are designed as low-oxygen environments so that the waste *cannot* decay. This environment helps to prevent decomposition which produces harmful greenhouse gases like methane and carbon dioxide, as well as leachate, which pollutes ground water and soil. Much of the organic material in an ancient Roman landfill that was twenty centuries old had not fully decomposed. 50% of all landfill made today is paper that will be mummified for future archeologists.

No one likes EPS Cooler Boxes, especially your customers! By only utilizing truly recyclable materials such as ♻ PET sourced from water bottles, Thermal Shipping Solutions has created the best **green** cold-chain product that actually works! The Renewliner is 100% ♻ PET recyclable.

Other so-called green alternatives just try to make you feel less guilty about throwing their product in the trash or make false claims of biodegradability and compostability. Landfills are meant to *prevent* decomposition so there is little difference between EPS and a banana peel once it reaches the dump! Recycling is the best and most responsible way to help the environment.

The Renewliner is packed flat to save storage space. Simply push it into your box, pack and seal as normal. Your customer can toss the carton in the paper bin and the Renewliner in the plastic bin.

Custom printing and sizing available.
Call us for a custom-sized sample!

Don't be fooled by the Greenwashers. Recycling is the *only* way to prevent your green alternatives from ending up mummified in the dump. If you can't pour it down your drain, it is not biodegradable!

please reference <http://www.bpiworld.org/page-190439> for more information

Polyester Fiber (PET)

Sourced almost entirely from recycled drink bottles, PET fiber insulation is resilient and **fully curb side recyclable**. It can be provided compressed and custom printed in whatever size you need, always taking up less room in delivery trucks and your valuable storage space.

Recycling is the solution to the green challenges facing shippers today. Utilizing post-consumer recycled PET to manufacture insulation and making it easy to recycle into something else prevents waste, degradable or not, from filling our landfills.

100% Curbside Recyclable PET



Place me in your curbside bin! I am fully recyclable at your Community Recycling Center.

This **Renewliner** is 100% ♻ recyclable PET. There are no adhesives, PVC, papers or contaminants to the polyester recycling stream. The fill is recycled PET staple fiber directly from the spinneret. All ink is water-based. The film is 100% PET.

EXHIBIT E



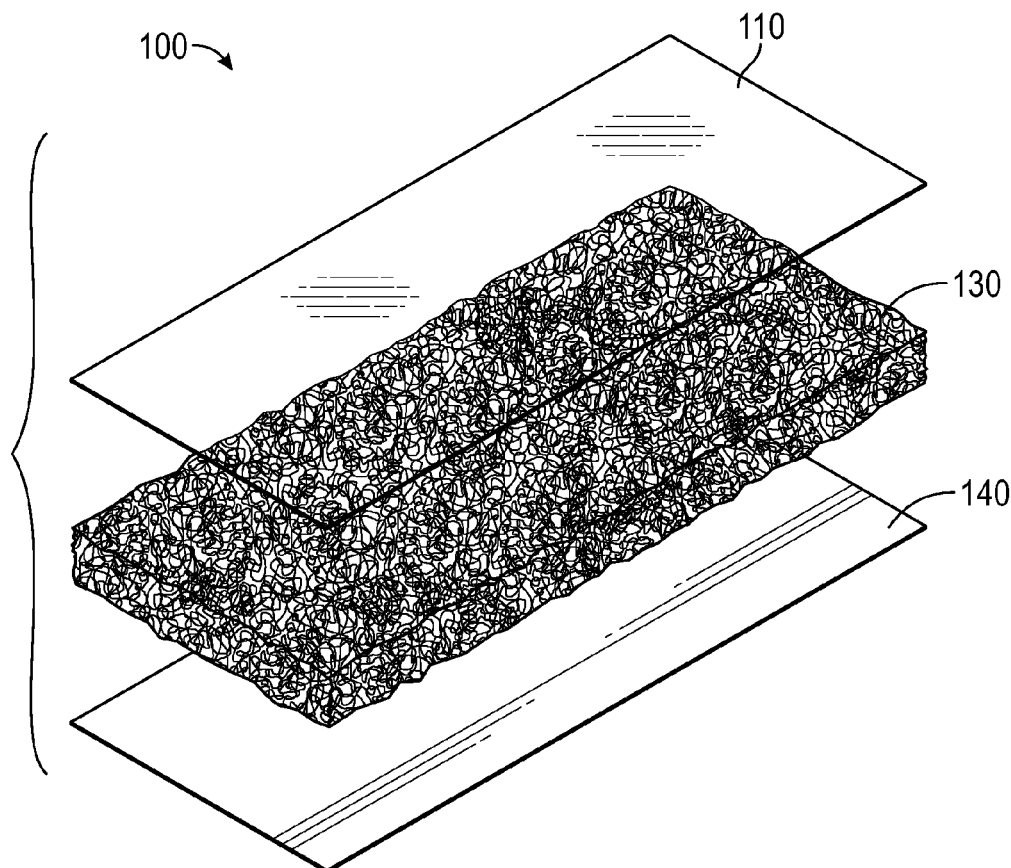
US 20190100371A1

(19) **United States**(12) **Patent Application Publication**
Cardinale et al.(10) **Pub. No.: US 2019/0100371 A1**(43) **Pub. Date: Apr. 4, 2019**(54) **POLYESTER TEREPHTHALATE RIGID
WADDING DISPOSED BETWEEN SURFACE
LAMINATIONS****Publication Classification**(51) **Int. Cl.****B65D 81/38** (2006.01)**B32B 27/08** (2006.01)**B32B 27/36** (2006.01)(52) **U.S. Cl.**CPC **B65D 81/3823** (2013.01); **B32B 27/08**
(2013.01); **B32B 2439/00** (2013.01); **B32B**
2307/304 (2013.01); **B32B 27/36** (2013.01)(71) Applicants: **Sal Jack Cardinale**, Mill Valley, CA
(US); **Sean McCoy**, Mill Valley, CA
(US); **Richard Ben Scott**, Mill Valley,
CA (US)(72) Inventors: **Sal Jack Cardinale**, Mill Valley, CA
(US); **Sean McCoy**, Mill Valley, CA
(US); **Richard Ben Scott**, Mill Valley,
CA (US)(73) Assignee: **SC Marketing Group Incorporated**,
Mill Valley, CA (US)(21) Appl. No.: **15/442,526**(22) Filed: **Feb. 24, 2017****Related U.S. Application Data**(60) Provisional application No. 62/299,471, filed on Feb.
24, 2016.

(57)

ABSTRACT

Rigid wadding, insulation and packaging for food and other products is made of homogeneous polyester terephthalate (PET) that satisfies the resin recycling identification code number one. For purposes of protecting an inner rigid wadding or other insulation, one or more film strips or film coatings may be applied by the artful use of amorphous (non-crystalized) PET that melts at a lower temperature and can act as a thermal bond adhesive. The film strips or film coatings may be made of homogeneous polyester terephthalate (PET) that satisfies the resin recycling identification code number one.



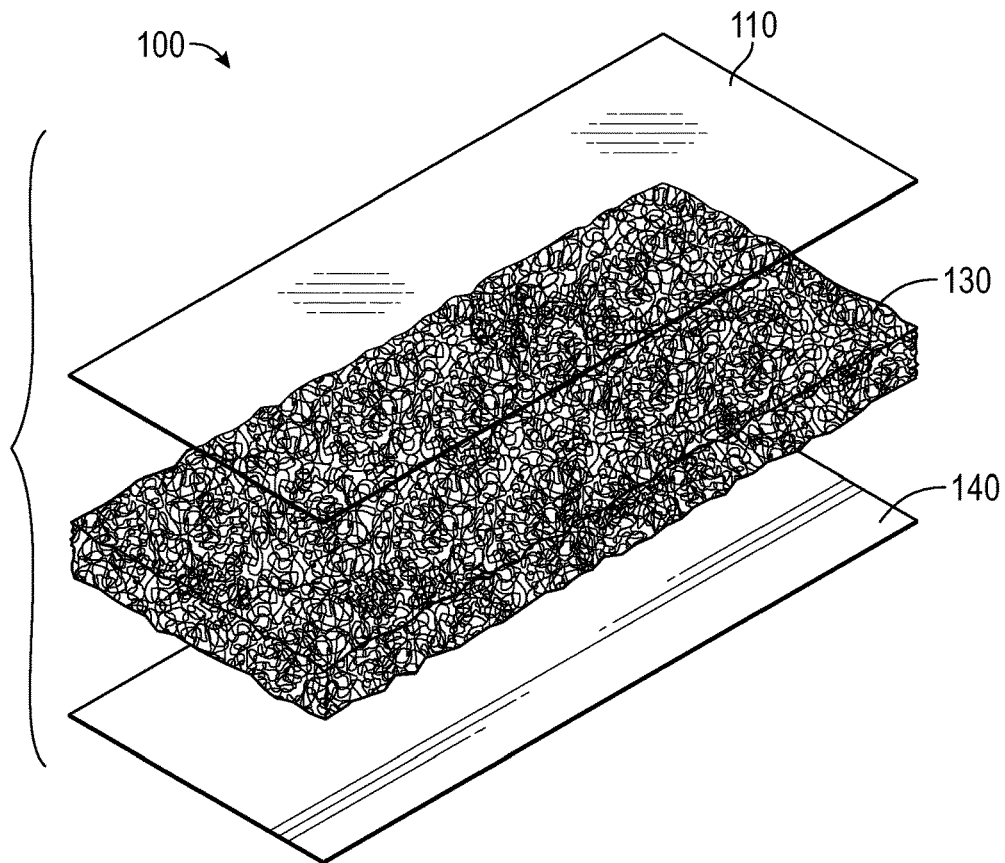


FIG. 1

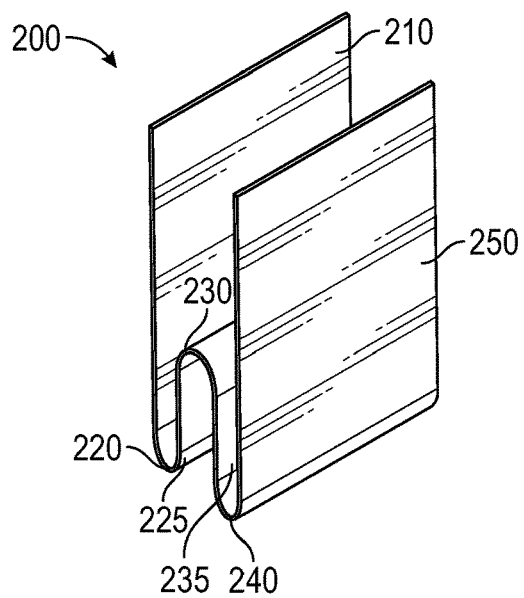
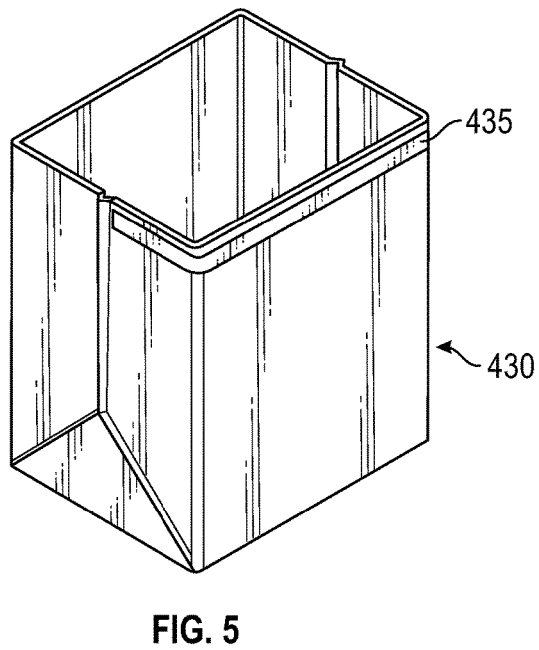
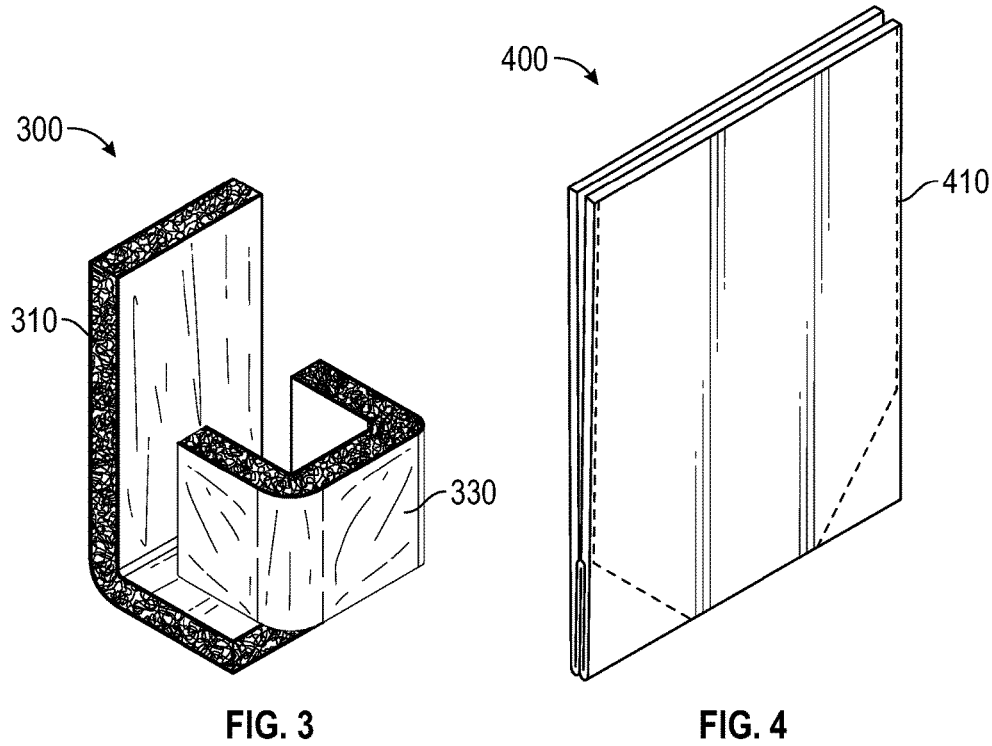


FIG. 2



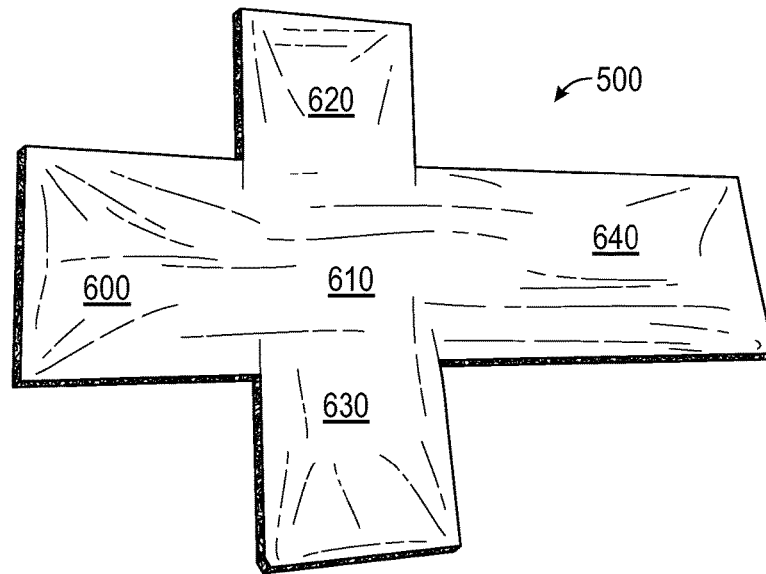


FIG. 6

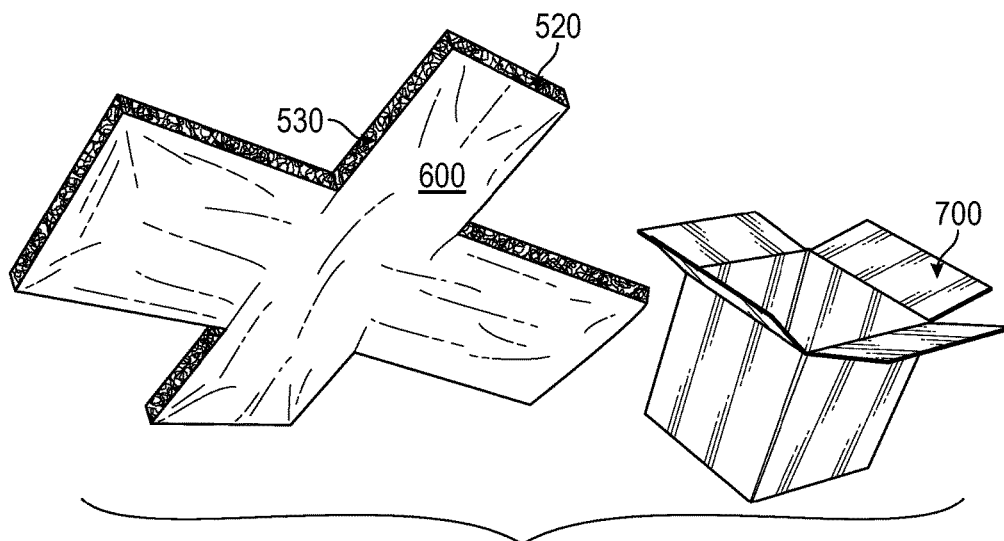


FIG. 7

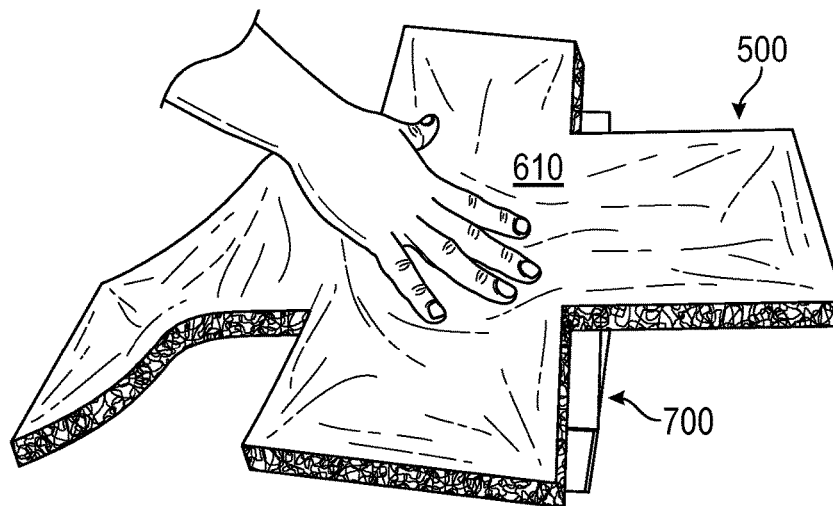


FIG. 8

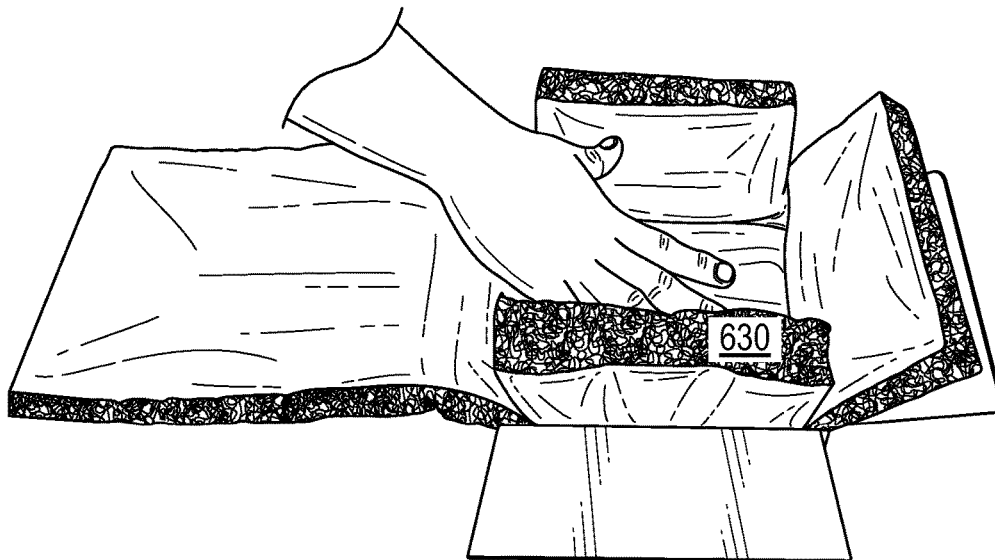


FIG. 9

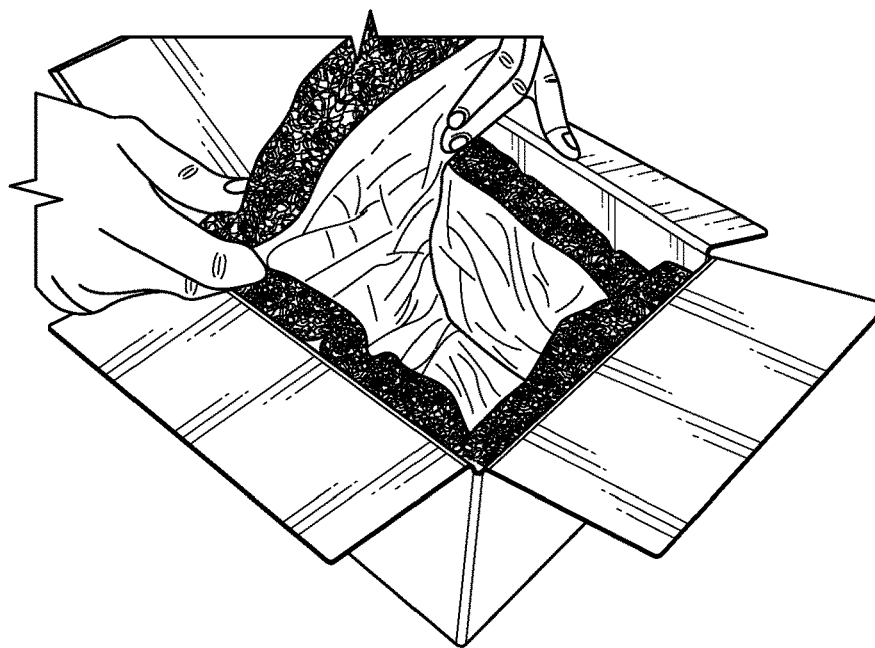


FIG. 10

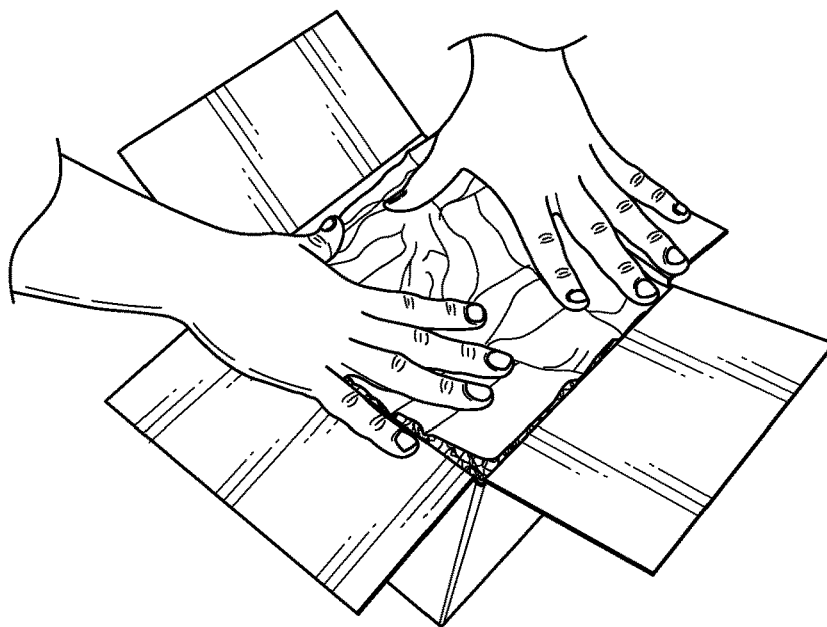


FIG. 11

US 2019/0100371 A1

Apr. 4, 2019

1

POLYESTER TEREPHTHALATE RIGID WADDING DISPOSED BETWEEN SURFACE LAMINATIONS

RELATED PATENT APPLICATION AND INCORPORATION BY REFERENCE

[0001] This is a utility application based upon U.S. patent application Ser. No. 62/299,471 filed on Feb. 24, 2016. This related application is incorporated herein by reference and made a part of this application. If any conflict arises between the disclosure of the invention in this utility application and that in the related provisional application, the disclosure in this utility application shall govern. Moreover, the inventor (s) incorporate herein by reference any and all patents, patent applications, and other documents hard copy or electronic, cited or referred to in this application.

COPYRIGHT AND TRADEMARK NOTICE

[0002] This application includes material which is subject or may be subject to copyright and/or trademark protection. The copyright and trademark owner(s) has no objection to the facsimile reproduction by any of the patent disclosure, as it appears in the Patent and Trademark Office files or records, but otherwise reserves all copyright and trademark rights whatsoever.

BACKGROUND OF THE INVENTION

(1) Field of the Invention

[0003] The invention generally relates to insulation systems. More particularly, the invention relates to the use of polyester terephthalate wadding bonded between surface laminations made of terephthalate film.

(2) Description of the Related Art

[0004] Various means and methods of making and using insulation are known in the prior art and include:

[0005] U.S. Pat. No. 3,170,832 issued to Wilson et al on Feb. 23, 1965 discloses various polyester resin laminated products. U.S. Pat. No. 5,506,036 issued to Bergerioux on Apr. 9, 1996 discloses various laminated materials used for packaging. U.S. Pat. No. 5,508,075 issued to Roulin et al on Apr. 16, 1996 discloses packaging laminate useful for the suppression of gasses and aroma. U.S. Pat. No. 7,182,985 issued to Ghisolfi on Feb. 27, 2007 discloses multi-layer polyester resin that is purportedly recyclable and useful for the fabrication of beverage and food containers.

[0006] While the prior art does disclose various forms of polyester in the manufacture of food storage or insulation products, the prior art fails to provide a number one PET recycling rating, as the prior art's use of impurities makes the prior art food storage solutions less than truly recyclable.

BRIEF SUMMARY OF THE INVENTION

[0007] The disclosed embodiments overcome shortfalls in the related art by presenting an unobvious and unique combination, configuration and use of pure polyester terephthalate configured into rigid wadding, with the rigid wadding bonded between surface laminations comprised of pure polyester terephthalate film. The disclosed embodiments include the use of polyesters such as polyethylene terephthalate.

[0008] The disclosed embodiments may include new means of bonding film to wadding as well as the artful integration of disclosed components into shipping containers.

[0009] The disclosed embodiments include a new "T" shaped form factor used in insulating boxes and other containers. Disclosed embodiments overcome shortfalls in the art by use of sealed seams, gusset configurations, AB box liner components and other components.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a perspective view of a laminate system

[0011] FIG. 2 is a perspective view of a bottom gusset

[0012] FIG. 3 is a perspective view of AB box liner components

[0013] FIG. 4 is a perspective view of box liner components in a folded position

[0014] FIG. 5 is a perspective view of a bottom gusset box liner in an expanded position

[0015] FIG. 6 depicts an isometric view of a disclosed embodiment in an open position

[0016] FIG. 7 depicts an isometric view of a disclosed embodiment and a packing box in an open position

[0017] FIG. 8 depicts an isometric view of a disclosed embodiment placed over a packing box

[0018] FIG. 9 depicts an isometric view of a disclosed embodiment partially placed within a packing box

[0019] FIG. 10 depicts an isometric view of a disclosed embodiment partially placed within a packing box with the last flap ready for closure

[0020] FIG. 11 depicts an isometric view of a disclosed embodiment placed within a packing box

REFERENCE NUMERALS IN THE DRAWINGS

[0021] 100 laminate system

[0022] 110 first film of a laminate system 100

[0023] 130 rigid wadding of a laminate system 100

[0024] 140 second film of a laminate system 100

[0025] 200 bottom gusset of box liner

[0026] 210 first vertical side of bottom gusset

[0027] 220 first downward arch of bottom gusset

[0028] 225 first inner vertical wall

[0029] 230 inner arch

[0030] 235 second inner vertical wall

[0031] 240 second downward arch

[0032] 250 second vertical side of bottom gusset

[0033] 300 AB box liner system

[0034] 310 "L" shaped component of the AB box liner system

[0035] 320 "U" shaped component of the AB box liner system

[0036] 400 bottom gusset liner in a closed position

[0037] 410 cut lines upon a bottom gusset liner in a closed position

[0038] 430 bottom gusset liner in an open or expanded position

[0039] 435 optional adhesive closure strip

[0040] 500 "T" shaped embodiment

[0041] 510 interior insulation material

[0042] 520 planar siding on either side of interior insulation material

[0043] 600 upper flap

[0044] 610 center section

CMS000504

US 2019/0100371 A1

Apr. 4, 2019

2

- [0045] 620 left flap
- [0046] 630 right flap
- [0047] 640 continuous lower flap and upper cover
- [0048] 700 container or packing box

[0049] These and other aspects of the present invention will become apparent upon reading the following detailed description in conjunction with the associated drawings.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0050] The following detailed description is directed to certain specific embodiments of the invention. However, the invention can be embodied in a multitude of different ways as defined and covered by the claims and their equivalents. In this description, reference is made to the drawings wherein like parts are designated with like numerals throughout.

[0051] Unless otherwise noted in this specification or in the claims, all of the terms used in the specification and the claims will have the meanings normally ascribed to these terms by workers in the art.

[0052] Unless the context clearly requires otherwise, throughout the description and the claims, the words “comprise,” “comprising” and the like are to be construed in an inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in a sense of “including, but not limited to.” Words using the singular or plural number also include the plural or singular number, respectively. Additionally, the words “herein,” “above,” “below,” and words of similar import, when used in this application, shall refer to this application as a whole and not to any particular portions of this application.

[0053] Referring to FIG. 1, a polyester rigid wadding system 100 is shown with a first film 110 attached to a rigid wadding structure 130 and a second film 140 also attached to the rigid wadding structure 130. The rigid wadding structure 130 and first and second films may be made of homogeneous polyester terephthalate (PET) such that the entire structure enjoys recycling identification code number one. In order to construct a disclosed laminate system 100 the two inner sides of the film strips may comprise amorphous (non-crystalized) PET. The amorphous sides of the film strips may be heated and thus adhere to the two outer sides of the rigid wadding. This method of using amorphous (non-crystalized) PET to thermally bond the film strips to the rigid wadding overcomes shortfalls in the prior art in that the disclosed method of attachment keeps the overall structure within the chemical boundaries of resin recycling identification code number one as no impurities are introduced. The disclosed use of amorphous (non-crystalized) PET upon the inner sides of the film strips allows for a relatively lower melting temperature to thermally bond the strips to the rigid wadding so as to not compromise the structural integrity of the rigid wadding.

[0054] The resulting disclosed structure may be manufactured in continuous sheets wherein low heat is applied to thermally bond the film strips to the upper and lower sides of the rigid wadding. The disclosed use and attachment of film to the rigid wadding overcomes shortfalls in the art by providing a protective film upon the rigid wadding to prevent fraying and other frictional damage to the rigid wadding. The disclosed application of film to the rigid wadding overcomes shortfalls in the art by providing smooth

outward surfaces such that the insulation sheets may be slideably stacked and unstacked without snags or undue friction.

[0055] Referring to FIG. 2, a perspective view of a bottom gusset 200 is shown and may be made of the structure shown in FIG. 1 and discussed above. A bottom gusset 200 may comprise an artful configuration comprising a first vertical side 210 or wall transitioning at a first downward arch 220, further transitioning to a first inner vertical wall 225, with the first inner vertical wall 225 transitioning or attached to an inner arch 230, from the inner arch 230 the structure of laminate may transition downwardly or be attached to a second inner vertical wall 235, with the second inner vertical wall 235 transitioning to a second arch 240, with the second arch attached to or transitioning and to a second vertical side 250. The disclosed bottom gusset configuration overcomes shortfall in the art by providing a stackable product that easily expands to a configuration shown in FIG. 5. The disclosed bottom gusset configuration overcomes shortfall in the art by easily providing a flat configuration as shown in FIG. 4 wherein linear cuts may be made to construct a storage box. The disclosed bottom gusset configuration overcomes shortfalls in the art by striking a fine balance between easy collapse for stacking, an outward bias for expansion and strength in full expansion.

[0056] Referring to FIG. 3, an AB box liner system 300 is shown and may comprise an “L” shaped component 310 and a “U” shaped component 330. The AB box liner system, and other systems, may be made from the disclosed laminate system 100 and then processed by use of cutting, sawing or pressing. The prior art has limitations in the attachment of PET films to inner structures such as rigid wadding. The prior art limitations require the use of non-recyclable material. In the presently disclosed embodiments, the film strip or film component may have an amorphous PET on one surface only, such that only one side or one surface may adhere to another object when heat is applied. Thus, the amorphous surface of the film needs to be oriented towards the fiber or rigid wadding (130 FIG. 1) on AB styled pieces.

[0057] Referring to FIG. 4, a folded or closed bottom gusset liner 400 is shown with cut lines 410. The execution of the cut lines 410 may result in the bottom gusset liner of FIG. 5.

[0058] Referring to FIG. 5, a bottom gusset liner 430 in an expanded position is shown with an optional adhesive closure strip 435. This structure overcomes shortfalls in the art by providing a container that is easily stacked and expanded. The bottom gusset variation requires the amorphous surface to be facing towards the fiber on the resulting exterior and facing away from the fiber on the resulting interior of the bag. Therefore, when heat and pressure is applied to seal the edges of the material the interior film seals to itself where there is an inside fold and the exterior film does not where there is an inside fold. Any fiber between the laminations is compressed to be paper thin and allows the amorphous material from the outer film to reach the surface of the inner film. The resulting bag opens like a grocery bag.

[0059] The term homogeneous polyester terephthalate (PET) may include all variants and compositions of PET that satisfies the resin recycling identification code number one.

[0060] FIG. 6 depicts a disclosed T shaped insulation component 500 in an open position. A disclosed embodiment may comprise one solid body as shown or several

US 2019/0100371 A1

Apr. 4, 2019

3

components cut to order to maximize material usage. In the shown embodiment, a center section **610** may be placed at the bottom of a container, while the top flap **600**, left flap **620** and right flap **630** compose vertical walls within a container. An elongated section, or continuous lower flap and upper cover **640** may be folded during installation and comprise a vertical wall and upper cover.

[0061] FIG. 7 depicts a disclosed embodiment comprising exposed edges **530** of uncovered interior insulation. Two or more sides of the interior insulation may be covered by planar siding **520**. A container **700** or box is shown in the background.

[0062] FIG. 8 depicts center section **610** of a disclosed embodiment **500** being pressed or inserted into a container **700**.

[0063] FIG. 9 depicts a center section pressed to the bottom of a container and exposed edges **530** of uncovered interior insulation.

[0064] FIG. 10 depicts five of six sides inserted into a container.

[0065] FIG. 11 depicts a disclosed embodiment completely inserted into a container.

[0066] Disclosed embodiments include all forms of insulation and containers.

[0067] Disclosed embodiments include pouches, comprising laminated PET, of any thickness, with such pouches folded once with edges flat sealed, as in having a bottom gusset liner on three edges and a forth edge comprising an opening that may be sealed so as to avoid exposed fiber edge.

[0068] Disclosed embodiments include envelopes which may be similar to the pouches disclosed herein, wherein envelopes may have additional length one surface to form a lip. Such a lip may be fully flat-sealed and be fastened by use of an adhesive strip or other means.

[0069] Disclosed embodiments include any three dimensional shape or configuration, such as the "T" shape further disclosed herein. In the construction of non-rectangle shapes, smaller pieces may be seamed together by use of additional PET film to construct living hinges or welds. Such hinges may be offset or reverse fold.

[0070] Cut edges may be laminated in an optional secondary process, which may be sometimes referred to as edge banding. Cut edges may be flat-sealed.

[0071] Disclosed embodiments may be cut or configured to form any shape, including corrugated carton configurations with optional auto locking features.

[0072] Disclosed embodiments may be cut or formed into envelop configurations such as those found in grocery stores and envelopes having clasps.

[0073] Disclosed embodiments may be laminated on one or both sides so as to provide an optional thickness or rigidity as to replicate the mechanical strength found in a corrugated box.

[0074] Disclosed embodiments may include laminates having a first and second planar side, with one or more of the planar sides cut differently or separately from the fiber. Laminates may have scoring to predict or direct folds. Fiber may be cut partially or fully without cutting the laminate on one side.

[0075] Disclosed embodiments may include the use of fiber laminated on one side, and folded such that the laminate faces inwardly, with said folded fiber inserted into

a prefabricated PET envelope or pouch. Heat may be applied to the exterior surface of the PET outer surface so as to fuse the pouch to the fiber.

[0076] Disclosed embodiments may include or use interior fiber folded in a tube configuration such that the edges meet in the middle of the face of the pouch.

[0077] Disclosed embodiments may include the use of a "T" shaped embodiment **500** placed into a container or box, with the box comprising a disclosed bottom gusset system **200**.

[0078] Disclosed embodiments include the use of hollow fiber form factors in using PET. The hollow fibers may be of any length and overcome shortfalls in the art by providing air gap insulation and weight reduction to the finished product.

[0079] The above detailed description of embodiments of the invention is not intended to be exhaustive or to limit the invention to the precise form disclosed above. While specific embodiments of, and examples for, the invention are described above for illustrative purposes, various equivalent modifications are possible within the scope of the invention, as those skilled in the relevant art will recognize. For example, while steps are presented in a given order, alternative embodiments may perform routines having steps in a different order. The teachings of the invention provided herein can be applied to other systems, not only the systems described herein. The various embodiments described herein can be combined to provide further embodiments. These and other changes can be made to the invention in light of the detailed description.

[0080] All the above references and U.S. patents and applications are incorporated herein by reference. Aspects of the invention can be modified, if necessary, to employ the systems, functions and concepts of the various patents and applications described above to provide yet further embodiments of the invention.

[0081] These and other changes can be made to the invention in light of the above detailed description. In general, the terms used in the following claims, should not be construed to limit the invention to the specific embodiments disclosed in the specification, unless the above detailed description explicitly defines such terms. Accordingly, the actual scope of the invention encompasses the disclosed embodiments and all equivalent ways of practicing or implementing the invention under the claims.

[0082] While certain aspects of the invention are presented below in certain claim forms, the inventors contemplate the various aspects of the invention in any number of claim forms.

What is claimed is:

1. A system of insulation material, the insulation material comprising pure polyethylene terephthalate ("PET").

2. The system of claim 1 wherein the wherein the insulation material of pure PET is in the form of a film.

3. The system of claim 1 wherein the insulation material of pure PET is in the form of laminate system wherein all parts of the laminate system are of pure PET, the laminate system (**100**) comprising a rigid wadding (**130**) fastened between a first film (**110**) and a second film (**140**).

4. The system of claim 3 wherein the laminate system is configured in a bottom gusset (**200**) of a box liner, the bottom gusset comprising a first vertical side (**210**) attached to a first downward arch (**220**), the first downward arch attached to a first inner vertical wall (**225**), the first vertical

US 2019/0100371 A1

Apr. 4, 2019

4

wall attached to an inner arch (230) the inner arch attached to a second inner vertical wall (235), the second inner vertical wall attached to a second arch (240) the second arch attached of a second vertical side (250).

5. The system of claim 1 wherein the PET insulation material is configured into the form of the bottom gusset (200)

6. The system of claim 1 wherein the PET insulation material is in the form of an AB box liner system (300), the AB box liner system comprising a “L” shaped component (310) and a “U” shaped component (320).

7. The laminate system of claim 3 in the form of the AB box liner system.

8. The system of claim 3 wherein the laminate system is in the form of a “T” shaped (500) insulation system, the “T” shaped insulation system comprising a center section (610) the center section attached to an upper flap (600), a left flap (620) a right flap (630) and a continuous lower flap (640).

9. The bottom gusset of claim 4 having an outward bias so as to assist in expansion to an open position.

10. The system of claim 3 using wherein the PET is in the form factor of hollow core fiber and hollow core fibers are used to construct the laminate system.

* * * * *

EXHIBIT F

∞ **InfinityCore**™

thermal liner

- ∞ A and B panel design for six sided boxes
- ∞ Thermal performance - up to 72 hours
- ∞ Cushions and protects products
- ∞ Industry first product
- ∞ Eco-friendly product, Non-toxic
 - Made from recycled PET fibers
 - 85% recycled PET content
 - Recyclable
- ∞ Lightweight
- ∞ Cost effective
- ∞ Patent pending

InfinityCore thermal liners are industry first packaging materials manufactured by Cellulose Material Solutions, LLC (CMS). Unlike other packaging products, InfinityCore is the only box liner comprised entirely of polyethylene terephthalate (PET). Recycled PET fibers are used for the core and a PET film is applied to the sides of the panels, eliminating the need to over bag or seal the individual panels. Plus, InfinityCore can be reused or recycled with plastics.

Maintaining temperatures to preserve freshness and prevent spoilage is crucial to customer satisfaction. InfinityCore cushions, protects and maintains temperatures with fewer refrigerant packs than other non-PET materials. InfinityCore provides thermal performance for up to 72 hours. Choosing InfinityCore delivers quality at a competitive price.

*Protect your goods with
InfinityCore thermal liners*

protects cargo.
maintains temperatures.
simple design.
eco-friendly product.



***Maintains temperatures
longer with fewer ice packs
than other materials.***



Recommended uses:

- Refrigerated and frozen goods
- Perishable food products
- Pharmaceuticals

manufactured by:



cellulose material solutions, llc

cmsgreen.com info@cmsgreen.com 888 968 9877

∞finitycore™

thermal liner

Product Specifications

- ∞ Thicknesses available: .375" to 3.0"
- ∞ Available as individual liners or master rolls
- ∞ Customized sizes and products based on required performance and box dimensions
- ∞ Simple, easy assembly for in box placement
- ∞ Shipped flat to save storage space
- ∞ Non-toxic, non-irritating and lightweight
- ∞ Recyclable or reusable

InfinityCore thermal liners are custom designed to eliminate air gaps, because they are engineered to meet tight tolerances and specific carton sizes. Resulting in the lowest total cost packaging solution for a variety of products and needs.

**Made from
recycled bottles**



Why InfinityCore thermal liners?

1. Industry first product made entirely from PET
2. Recyclable or reusable
3. 85% recycled PET content
4. Cost-effective - does not need to be overbagged or sealed
5. Thermal performance for up to 72 hours
6. Requires less gel packs or dry ice
7. Eliminates air gaps to improve packaging performance
8. Cushions and protects products and goods
9. Replaces the need for EPS coolers, which are known to be harmful for the environment
10. Custom sizes available

*Simply place liners in box,
add goods and refrigerant,
and seal for shipment*

cmsgreen.com info@cmsgreen.com 888 968 9877



InfinityCore thermal liner performance characteristics

Material	.75"	1.0"	1.5"
Refrigerant	12# ice	12# ice	12# ice
Duration under 40° F	Up to 60 hours	Up to 66 hours	Up to 72 hours



EXHIBIT G



protects cargo.
maintains temperatures.
simple design.
eco-friendly product.

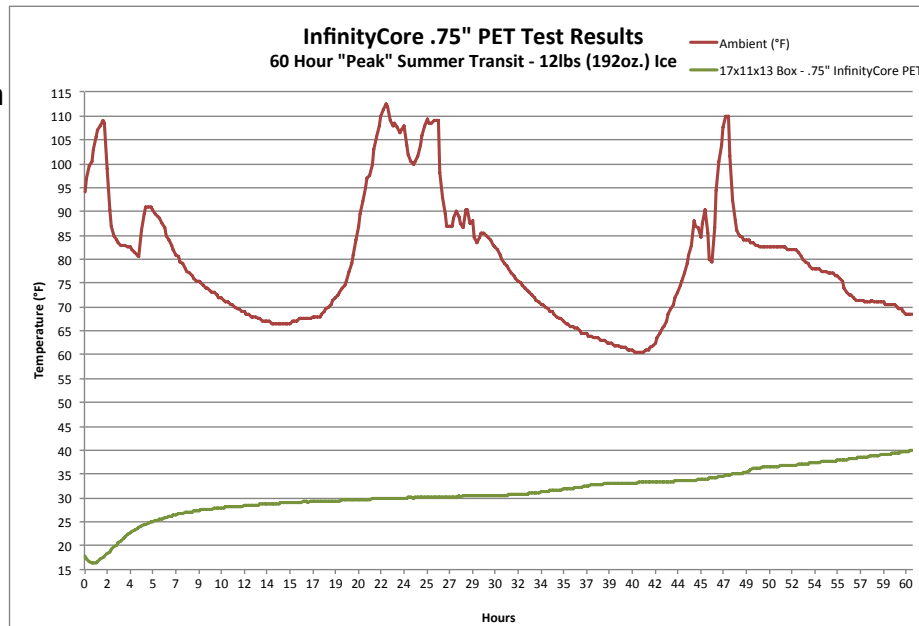
Product Specifications

- ∞ Thicknesses available: .5" to 3"
- ∞ Available as individual liners or master rolls
- ∞ Customized sizes and products based on required performance and box layout

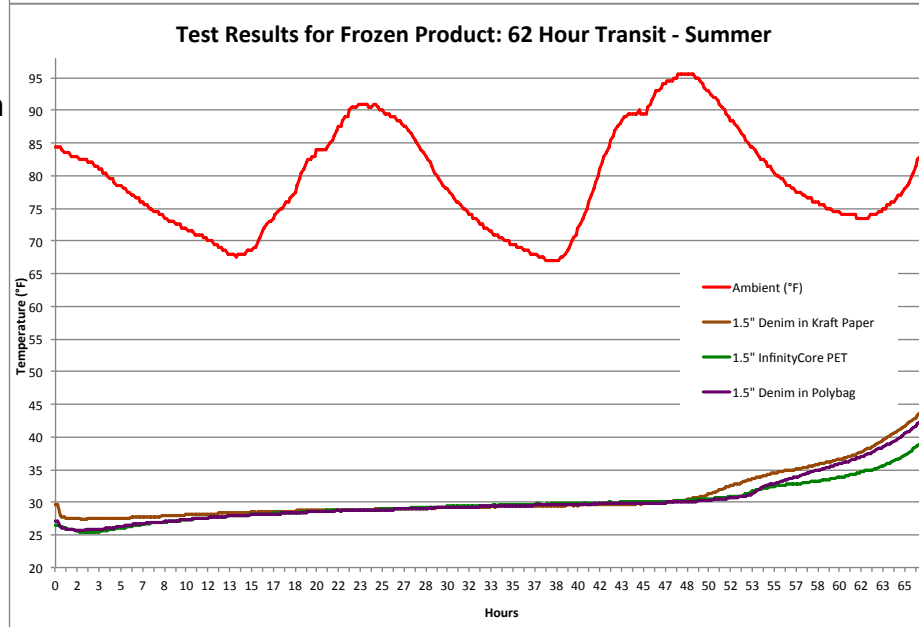
- ∞ Recyclable or reusable
- ∞ Lightweight
- ∞ Patent pending
- ∞ Superior thermal performance compared to other cooler materials

Testing and Technical Data:

Liner Used: InfinityCore .75"
Test Details: 48 oz. of frozen protein
Box Size: 17" x 11" x 13"
Refrigerant Used: 12 lbs
 4 - 48 oz ice packs
Max Ambient Temp: 112.5° F
Temperature of Protein after 60 Hours: 39.6° F



Liner Used: InfinityCore 1.5"
Test Details: 24 oz. of frozen protein
Box Size: 10" x 10" x 10"
Refrigerant Used: 7 lbs
 7 - 16 oz gel packs
Max Ambient Temp: 95.5° F
Temperature of Protein after 62 Hours: 34.7° F
Time for Protein to reach 39° F: 66.33 hours



CMS has performed additional performance tests on various InfinityCore materials. Technical information and testing data is available upon request.

Liners are custom designed to eliminate air gaps and manufactured to meet tight tolerances for a reliable and effective packaging solution. Custom sizes and thicknesses can be engineered to customer specific carton sizes.

manufactured by:



cellulose material solutions, llc

cmsgreen.com
 info@cmsgreen.com
 888 968 9877

CMS000510

EXHIBIT H

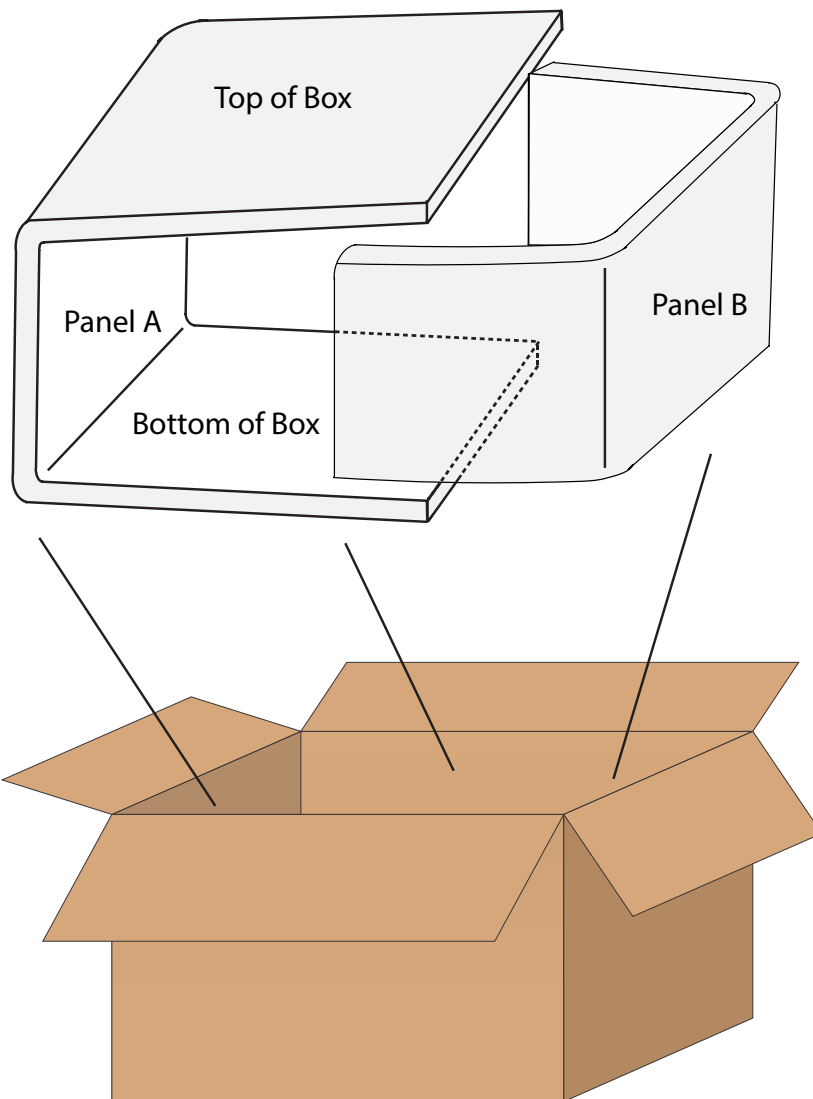


protects cargo.
maintains temperatures.
simple design.
eco-friendly product.

Assembly Instructions

Use the illustration to the right as a guide for easy assembly of the InfinityCore liner.

1. Fold Panel A along the bottom and back side of the box.
2. Fold Panel B along the sides and front of the box. Panel B's edge will sit on top of Panel A along the bottom of the box.
3. Ensure the panels are pressed securely against all sides of the box and there are no gaps between panels.
4. Load your product(s) and refrigerant(s) into the box opening.
5. Fold the top of Panel A over the box opening, close and secure the top of the box.



manufactured by:



cellulose material solutions,llc

888 968 9877

cmsgreen.com

info@cmsgreen.com

CMS000515

EXHIBIT I

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3938538

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
KEVIN CHASE	05/27/2016
BRANDON FENSKE	05/27/2016
CHRISTOPHER BENNER	05/31/2016
MATTHEW HENDERSON	05/27/2016
RECEIVING PARTY DATA	
Name:	CELLULOSE MATERIAL SOLUTIONS, LLC
Street Address:	2472 PORT SHELDON ST.
City:	JENISON
State/Country:	MICHIGAN
Postal Code:	49428
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15194364
CORRESPONDENCE DATA	
Fax Number:	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	616-965-2430
Email:	patents@mitchelliplaw.com
Correspondent Name:	MITCHELL INTELLECTAL PROPERTY LAW PLLC
Address Line 1:	1595 GALBRAITH AVENUE SE
Address Line 4:	GRAND RAPIDS, MICHIGAN 49546
ATTORNEY DOCKET NUMBER:	CMSP301US1-UTL
NAME OF SUBMITTER:	JAMES A. MITCHELL
SIGNATURE:	/James Albee Mitchell/
DATE SIGNED:	06/28/2016
Total Attachments: 2	
source=CMSP301US1UTL_Assignment#page1.tif	
source=CMSP301US1UTL_Assignment#page2.tif	

Atty Docket No. CMS P301US1-UTL

ASSIGNMENT

WHEREAS, **Kevin Chase**, residing at 3886 Acadia Dr., Hudsonville, MI 49426; **Brandon Fenske**, residing at 1910 Luce, Grand Rapids, MI 49534; **Christopher Benner**, residing at 612 Highbury Court SE, Ada, MI 49301; and **Matthew Henderson**, residing at 2678 Hawthorne Ct., Jenison, MI 49428, respectively ("Assignors"), have invented certain new and useful improvements in THERMOPLASTIC PACKAGING INSULATION PRODUCTS AND METHODS OF MAKING AND USING SAME, for which a non-provisional patent application was filed on June 27, 2016, and assigned Serial No. 15/194,364.

WHEREAS, **Cellulose Material Solutions, LLC**, a limited liability company of the state of Michigan, having a place of business at 2472 Port Sheldon St., Jenison, MI 49428 ("Assignee"), is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignors hereby sell, assign, and transfer unto Assignee the full and exclusive right, title and interest to the invention in the United States and in all foreign countries and the entire right, title and interest in and to said above-identified non-provisional patent application, and in and to any and all Letters Patent claiming priority to this application and/or said prior provisional application, which may be granted therefor in the United States and in any and all foreign countries and in and to any and all divisions, reissues, continuations, continuation-in-part, and extensions thereof including the full right to claim for any such applications the benefits of the International Convention.

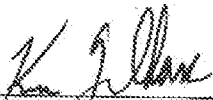
Assignors hereby authorize and request the Patent Office Officials in the United States and in any and all foreign countries to issue any and all of said Letters Patent, when granted, to Assignee as the owner of the entire right, title and interest in and to the same, for the sole use and benefit of Assignee, its successors and assigns.

FURTHER, Assignors agree to communicate to Assignee or its representatives any facts known to Assignors respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all patent applications, divisional, continuation, continuation-in-part, substitution, renewal, and reissue applications, claiming priority to this application, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to Assignee, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper protection for the invention in the United States and in any and all foreign jurisdictions.

IN WITNESS WHEREOF, I have signed this Assignment as of the date appearing next to my signature.

Inventor:

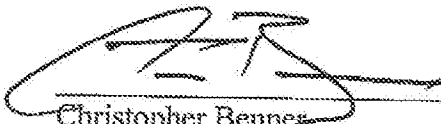
Date:


Kevin Chase

5-27-16


Brandon Fenske

5-27-16


Christopher Benner

5-31-2016


Matthew Henderson

5-27-16